Faculty's conceptions of teaching introductory economics in higher education: A phenomenographic study in a South African context

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ABSTRACT

In view of the on-going global debate about the economics curriculum and its teaching, this paper explores how the faculty responsible for teaching introductory economics at a South African university understand learning and teaching of their subject. We have adopted a qualitative research approach, phenomenography, to complement what we already know from mainstream literature on undergraduate economics education, predominantly published by academic economists using a quantitative methodology. After a phenomenographic analysis of interview data with lecturers and tutors, six conceptions of teaching introductory economics (*Economics 1*) emerged: (I) team collaboration to implement the economics curriculum; (II) a thorough knowledge of the content; (III) implementing the curriculum in order for students to pass assessment; (IV) helping students learn key economics concepts and representations to facilitate learning; (V) engaging students through their real-life economics context to acquire economic knowledge; and (VI) helping students think like economists. These are discussed first in relation to the implications for student learning and second, in a broader context of higher education discourses and educational development.

1. Introduction

Economics is a disciplinary, theoretically-based subject taught at undergraduate and postgraduate levels at universities globally. Teaching economics now is "at a time when economists are tackling subjects as diverse as growth, auctions, crime, and religion with a methodological toolkit that includes real analysis, econometrics, laboratory experiments, and historical case studies, and when they are debating the explanatory roles of rationality and behavioural norms, [and] any concise definition of economics is likely to be inadequate" (Backhouse and Medema, 2009, p. 231). Evidence from the literature on tertiary level economics education shows that student performance is consistently poor (Dalziel, 2011; Mallik and Lodewijks, 2010), and this is also the case in South Africa. Within the South African context, evidence of "high dropout and failure rates in the undergraduate […] economics modules" is apparent (Bokana and Tewari, 2014, p. 261). This dismal performance of South African university students in economics links to one of the broader challenges of increasing access and improving throughput and retention, which are key elements of an ongoing national discourse in South African higher education (Council on Higher Education (CHE), 2010).

The research literature on university-level economics education has a dominant discourse formed by academic economists who have published widely on the subject in the United Kingdom, United States and Australia (Becker, 1999, 2001; Becker et al., 2012; Becker and Kennedy, 2005; Becker and Watts, 1996; Watts and Becker, 2008). This dominant perspective, mainly published by the International Review of Economics Education (IREE) and Journal of Economic Education (JEE), has taken a quantitative stance in

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exploring the debates around teaching, learning and assessment in economics teaching in higher education. In this paper we offer the infusion of an educationalist's perspective into the debate, making use of an educational theoretical lens, which we believe to be signficant for the field of economics education. Pang et al. (2006) have previously published a paper on phenomenography in the International Review of Economics Education (IREE). The authors used the practice of 'learning study' to argue for the 'pedagogy of awareness' between teachers and learners to support learning.

We focused primarily on faculty's understanding of their teaching and the possible implications for student learning of Economics as a discipline in the first year of study. This was the main introductory economics course called 'Economics 1′ in South African universities, similar to Dalziel's first-year Principles of Economics course within an American higher education system (Dalziel, 2011). The work was located in a top research-intensive, globally-ranked South African university (hereafter called SAUni), at its Department of Economics, where the characteristics of economics teaching were similar to those elsewhere in the world. There were large classes with students from different programmes of study, and there was a strong reliance on lectures in parallel large classes, supported by tutorials in smaller groups. In addition to this, teaching economics in first-year is highly technical and often mathematical in nature (Schoer et al., 2010; Ward-Perkins and Earle, 2013).

The main empirical question we asked was: *How do the members of faculty teaching Economics 1 understand and experience teaching Economics 1 at SAUni?* The study, carried out in the framework of phenomenography, explored the faculty's conceptions of teaching economics, thereby creating new knowledge on teaching economics in higher education. We then considered the relation between the conceptions held by the faculty to the work of the university and the course, Economics 1.

2. The research approach: phenomenography

Research into tertiary economics education has largely been published by academic economists who have used quantitative research methodologies to understand teaching and learning in higher education (Andrietti, 2014; Becker, 1996, 1997; Becker et al., 2012; Becker and Watts, 1996; Bosshardt and Walstad, 2017; Denny, 2014; Guest, 2005; Guest and Duhs, 2002; Olitsky and Cosgrove, 2016). There have been qualitative studies made of economics education at tertiary level, for example Reimann (2004) which looked at the learning environments created in first-year university economics courses, and Salemi (2005) where the structures of economics curricula were described and contrasted.

We have turned to a particular qualitative research paradigm from the field of education, phenomenography, which has been extensively used to study numerous aspects of teaching and learning in higher education, for example work on physics (Booth and Ingerman, 2002), engineering (Lundström and Booth, 2002); and computer science (Berglund, 2006). But there is less, if any, specifically concerning teaching and learning the discipline of economics in higher education. In addition, there is considerable phenomenographic literature concerning teaching and learning in a more theoretical perspective and concerning broader but related issues in higher education, such as on faculty understanding of their research and their teaching (Brew, 2001; Prosser et al., 2008), the relation between teachers' understanding of teaching and learning and student outcomes (Prosser and Trigwell, 1999, 2014; Trigwell and Prosser, 2014), and students' experience of internationalisation (Ojo and Booth, 2009).

Phenomenography offers three important advantages to a qualitative study of teaching and learning in economics. First, it is strongly represented in related issues across a wide field of disciplines, as witnessed above; second, it encompasses both a foundational theory and a research methodology for such a study; and third, the study is readily of interest and accessible to academic economists who are not necessarily immersed in educational theory. We provide a brief introduction of the theory here.

Phenomenography as a conceptual framework is premised on a relational view of the world and that there is a limited number of qualitatively distinct ways of experiencing it (Marton, 1981; Marton and Booth, 1997). Learning about the world from a relational view is "a qualitative change in a person's way of seeing, experiencing, understanding, conceptualizing something in the real world—rather than a change in the amount of knowledge which someone possesses" (Marton and Ramsden, 1988, p. 271). Prosser and Trigwell (1999) noted that essentially these ideas (theoretical ideas from phenomenographic perspective) suggest that the world, as experienced, is non-dualistic. That is, students' and teachers' experiences are not constituted independently of the world of learning and teaching in which they are engaged, but they and the world of learning and teaching are constituted in relation to each other. From this perspective, students' and teachers' experiences are always experiences of something (p. 10).

The phenomenographic approach to studying the ways in which people understand and tackle these tasks of teaching and learning is aimed at revealing the qualitative variation therein. Phenomenography "aims to investigate the qualitatively different ways in which people understand a particular phenomenon or an aspect of the world around them" (Marton and Pong, 2005, p. 335). As a qualitative research approach, it is rigorous and its ultimate aim is to achieve an outcome space of qualitative variation in the way a target population of people understand or experience or conceptualise a particular phenomenon. Pang introduces the terms "categories of description and outcome space" (Pang, 2003, p. 146) as characterising the results of a phenomenographic study:

Phenomenography set out to reveal the different ways in which people experience the same phenomena in the same situation. The object of research is thus the qualitatively different ways in which people are aware of the world, and the ways in which they experience various phenomena and situations around them, wherein the categories of descriptions and outcome space are instrumental in characterising how people experience reality. (Pang, 2003, p. 154)

Tight (2016), in a critical commentary on phenomenographic work, summarises the method succinctly:

For any given phenomenon of interest, there are only a limited number of ways of perceiving, understanding or experiencing it. Typically, the number identified is relatively small – e.g. only four or five variants are commonly found – and, as with most forms of qualitative research, these are identified on the basis of a relatively small number of interviews (20 or fewer are typical). Most commonly – and, it would seem, most satisfactorily – the various ways of experiencing the phenomenon identified [categories of

description] can be organised in a hierarchy [the outcome space], with each higher level encompassing those below it, and the highest level representing the most advanced or developed way of experiencing the phenomena. (Tight, 2016, p. 320; authors' additions in brackets)

These brief statements hardly do justice to the painstaking work that goes into the design, the data collection and the data analysis of a study, but certainly suffice to open the description of our study.

Phenomenography opens up a number of ways in which a researcher can conduct a qualitative study and be creatively adaptable in deciding how to generate and analyse data. The aim of the research was to describe how others conceptualised (or understood or experienced) a phenomenon, in this case the phenomenon of teaching and learning introductory economics. To this end, interviews are generally held in which a small number of open-ended questions are put to the people involved, and responses are followed up until the subject is mutually exhausted. Data for this paper was gathered during the 2012 and 2013 academic sessions at the Department of Economics at SAUni. Eight lecturers and seven tutors who were involved in teaching first-year economics in those years were interviewed following the phenomenographic research principle of ensuring that in the sample there is a variation in experience which is as wide as possible. Three of the lecturers were female and five were male; two had masters' degrees and six were studying for their masters; all had previous experience in the course with at least two years as lecturers, some as former students and others as former tutors. Of the total of 15 tutors involved in the course, seven were interviewed: four were male and three were female. All were final year Honours students and, with one exception, it was their first year as tutors. In international terms, these lecturers and tutors had rather low qualifications but they were typical of the South African economics teaching corps for introductory courses.

Three opening questions were asked in each in-depth, semi-structured interview which lasted 45–60 min. The first question explored lecturers' and tutors' understanding of teaching Economics 1, drawing upon their lived experiences. The second question focused on finding out what they did in lectures and tutorials that they considered enhanced their teaching experience and thus resulted in student learning. The third question sought to understand what in their experience made an effective teacher of Economics I. Each of the introductory questions was followed up by discussion, ensuring that the researcher and the interviewee understood each other, for example by offering examples, and attempting to fully explore the subject of teaching Economics 1. Of necessity, the interviews with lecturers and tutors differed somewhat, to account for their different levels of experience and expertise. Each interview was audio-recorded and transcribed verbatim which generated transcripts to form the raw material for the data analysis stage.

Analysis of the interview transcripts is an iterative process in which the entire collection of transcripts is treated as one "pool of meaning"; it is "a cyclical process of repeatedly moving between analysis and readings of the data" (Boon et al., 2007, p. 214), reading extracts as parts of whole interviews and as part of a collection of related extracts. ATLAS.ti, a Windows-based application that supports qualitative data analysis, helped at the initial phase to organise and arrange the large extracts to simplify further meaningful reiteration (Hwang (2008). The textual data that was generated through the interviews were preliminarily coded and arranged using ATLAS.ti. Through this process, the large set of extracts emerged that highlighted the phenomenon of teaching Economics 1. These were grouped and regrouped according to their focus to form preliminary categories. We critiqued the structure in line with the phenomenographic principle that internally the set of categories was logically related, while externally they were related clearly to the phenomenon in question. After a number of iterations and illustrations of each category from the extracts of text, the authors thrashed out any weaknesses and inconsistencies until a strong group of categories was arrived at. Each category could be seen as expressing a particular qualitatively distinct way of conceptualising teaching Economics 1, and the set was seen to be complete with respect to the entire data set.

In practice, we actually analysed the interviews with lecturers and tutors separately, as we assumed they would lead to different sets of categories. However, we found, not too surprisingly, that there was a large degree of overlap: each analysis resulted in five categories and each differed from the other by only one category – the least developed being unique to the tutors and the most developed unique to the lecturers. For this paper we are synthesising the two sets of categories into a single set to reflect the whole responsibility for teaching.

In the following section, first we present the outcome space of six categories, illustrated with extracts from lecturers' and tutors' interviews. Thereafter we discuss an analysis of the outcome space itself, both according to the focus of the category, and according to their structure in terms of their internal horizon – what constitutes the conception in the category – and their external horizon – what background the conception is located in. There follows a discussion of the categories and their implications for teacher understanding of teaching and student learning.

3. Results

The outcome space for the faculty as a whole could be described in six qualitatively distinct categories of description.

  I Teaching Economics 1 as collaboration between lecturers and tutors to implement the economics curriculum;
 II Teaching Economics 1 as having a thorough knowledge of the content;
III Teaching Economics 1 as transmitting the content of the textbook, assessing correctly, and students being able to pass examinations according to the curriculum;
IV Teaching Economics 1 as helping students learn key economics concepts and developing students' ability to use appropriate representations;
 V Teaching Economics 1 as helping students acquire economic knowledge by making this relevant to students' own context and

experience; and

VI Teaching Economics 1 as helping students think like economists.

We now describe these categories and illustrate them with extracts from the interviews. We denote an extract from a Lecturer by 'L', numbered 1 to 8, and from a tutor as 'T', numbered 1 to 7.

Category I:
Teaching economics 1 as collaboration between the lecturers and tutors to implement the economics curriculum.

This category was unique to the analysis of the tutors' interviews, and emphasised their roles as assistants. The emphasis was on the synergy between the lecturers and tutors in helping students learn the economics curriculum. As such, it was teacher-centred and content-oriented.

Students can actually engage the material, you know. They have time to go and look at it and try it. If they get it wrong, they have the opportunity to ask the tutor. Or even if the tutor can't explain it or does a poor job of explaining, he or she still has the opportunity to come and consult with me, as the lecturer. [L2]

The major difference is that the lecturers teach in a big class. They cannot give individual attention to students in a big class where they are lecturing. They can't stop every 5 min to explain to a single student that concept that they are not getting. So, the tutors complement the lecturers [when] those students that didn't get the concept in class or didn't understand it, are able to go in for individual attention [with the tutors]. You are able to break down the concepts to the bare minimum [with the students]. So basically how the tutoring helps is that you are able to give individual attention to specific students with the concepts they don't understand. [T1]

It was the least complete category of the whole set. The essence of this category was the ability of the tutors and lecturers to work hand-in-hand within the Economics 1 curriculum, to complement each other's role in the teaching-learning process, as seen from the perspective of the tutors. Within the university's system, there were weekly meetings between tutors and lecturers to track the progress made in teaching and tutoring the curriculum with the main objective of making sure that what each party aligned with what the other party did.

We have meetings as tutors. We don't just administer tutorials without sitting down with lecturers, course co-ordinators, and other tutors to discuss the content of the material [the Economics 1 curriculum] and the way in which we should actually administer the content. We discuss the way we should actually answer, the way to tutor because there's a difference between teaching… and tutoring. [T6]

In the extract above, a distinction was made between teaching and tutoring. Tutors were not meant to repeat what the lecturers did in the lectures. Instead, the focus of the tutorial system was on helping students make better sense of what the lecturers had taught in the weekly lectures.

And like a tutor's role is not to teach, we're just here to facilitate whatever you understand or facilitate your learning. Well I believe that's what the lecturer's role is, to teach. [T3]

For me it has always been how can we creatively use tutors to assist us as lecturers? They have to help us cope with introducing written or essay-type way of assessing students. We just have to see how these tutors can come into the party and help out. [L8]

Category II:

Teaching Economics 1 as having a thorough knowledge of the content.

At the heart of this category of description was the content of the Economics 1 course; the need for the lecturers and tutors to have an in-depth knowledge of this content was emphasised. This category stressed the teaching or tutoring role as dependent on the faculty's professional knowledge as academic economists and being prepared to adapt it to the curriculum. Just like the previous category, the focus of this category was on the teacher. As such, this category was teacher-centred and content-oriented as well. As one of the lecturers said:

Knowing your material is important as well as being well prepared for lectures. [L1]

The subject matter of Economics is not always straightforward. The work is not always straightforward. What you read is not always as straightforward as you think. A lot of students will come in and they think from what they've read they understood it and got an answer. But then you go and you explain to them, it's different. So I think the subject in itself as a whole is a bit challenging. For me the students I've come across, most of them say their most challenging subject is Economics. [T1]

There, the lecturer emphasised the importance of the 'material' as 'content' from the textbook and the need for an adequate preparation of the teacher to be able to present this content.

Well, for me […] the more you do something, the more likely your brain recognise it when you come across it. When you've done [taught] a concept over and over again, you understand it. So, I believe generally in learning you can't do anything once, unless you are very special *[chuckles]*. [T1]

Lecturers 'made the content theirs' as expressed in the quote below:

So even if I don't read this book I know what is inside because the way in which I engaged the book was such that I was engaging it

to find what the book is all about and understand it. But not only that, but ways in which I can also make the book mine by extending the examples. [L8]

This category of description was the least complete of the ways in which the lecturers experienced teaching Economics 1. Their professional knowledge and identity as economists was fundamental to it. Among the tutors this way of conceptualising their role was also found. For example:

Make sure that what you are explaining to them is what you yourself understand. Preparation as a tutor is very important. [T1]
I've spoken to my other colleagues like …[…]… who've been at [this university] since first year. They were told from the first year that, don't rely on past papers because you basically cram. But rather, you know, learn to understand the work, you know. So that's what I pick up – they don't really want to understand the work. They just want to do the course, pass and move onto the next level. [T4]
Category III:
Teaching Economics 1 as transmitting the content of the textbook, assessing correctly, and students being able to pass the exam according to the curriculum.

In this category, lecturers' experience of teaching Economics 1 focused on transmitting the content of the prescribed economics textbook and making sure assessment was dealt with correctly in order to help students pass. Thus, the heart of this category of description was the Economics 1 textbook as linked to the curriculum highlighted in the previous category. The lecturers related to the textbook as an enabling resource for teaching the curriculum. The course outline was related directly to the chapters of the prescribed textbook. The following extracts illustrated this position:

You have to teach the textbook material. [L7]
I do try to keep my slides with as few words as possible. I think different students learn from different ways, different methods. So, I have to try and incorporate different methods to get everybody to get as much learning as they can out of that hour. [L5]
Ok, um, well, in my opinion it's basically going through the prescribed textbook. I try to catch up and keep up with the sections that they're on. [T3]
Currently as a lecturer we stand up, and we teach the material out of the book.
We just deliver the content from the book. [L4]

This category was teacher-centred. To reinforce this *teacher-centred* category, the lecturers underscored the aspects of *assessment* and *students' ability to pass assessment* as vital *elements* in their teaching role of transmitting the content of the textbook:

We take the material as it is presented … directly in the book and ask the students to then interpret what they've learned in order to answer correctly… [L4]

And, more conceptually oriented:

When it comes to the assessment you need to test that fundamental understanding of concepts. And you need to test it within a context where students have to bring about a logical, theoretically sound and concise argument using those concepts. [L8]

Tutors also expressed understanding of their roles in this category. For example:

The main thing you need to know is you need to understand the main theories students are having problems with, that as well. If you understand the main theory, then whenever you explain it, then you have to explain it in such a way that even a baby would understand, or even someone who has never done economics would understand. [T7]

There was, however, an expression of being more oriented to the students' individual needs, such as:

Concept [of being a tutor] is basically going behind the scenes such that whatever question comes about content you can answer. [T5]

Assessment was also important here. The extract below alluded to this:

The thing is with multiple choice questions it requires you to do this thing with eliminating the answers that are not correct … for you to be able to do that you need to know your theory, you need to know how to apply what you've learned because if you can't do that there's no way you can get the correct answer. [T2]

The association between this category and the previous one (Category II) was in the way lecturers and tutors saw the ability to transmit the content of the textbook as building on their academic or professional standing as an economist – as a knower – and preparation for assessment. Put differently, though Categories I and II were *teacher-centred*, a necessary prerequisite to be able to teach Economics 1, this category emphasised that without being a *knower* the content of the textbook could not be communicated and the students could not acquire adequate knowledge of it.

Category IV:
Teaching Economics 1 as helping students learn key Economics concepts, and developing students' ability to use appropriate representations.

There is now a shift from teaching to students' learning and, as such, this category was *student-centred* and *learning-focused.* This

category expressed students making sense of economics knowledge constructs and developing skills related to representations of these constructs. While the previous categories of description were about the lecturer or tutor as a knower transmitting the content of the economics textbook, this category shifted the focus from the lecturers' knowing to students' learning.

From the lecturers came expressions of their understanding of teaching Economics 1 as helping students identify economics constructs including through the use of appropriate representations (equations and graphs). For example, L3 said:

> But the one thing though is that if somebody says they don't know, then I start prompting them. I say, 'Ok, well think about it this way. If exports have to decrease, then you can see it's a component of aggregate expenditure. So, what will happen to aggregate expenditure?' I start prompting them in order to make them understand what the thought processes is behind it. [L3]
>
> My job in the classroom is to help facilitate that understanding between the concepts and the textbook because … students will read, and they'll think that they understand. […]. So I start off with building up the basics (using equations and graphs) and then going to the model. I feel like that's my role as a lecturer, to facilitate that gap between the textbook and actual understanding. [L3]

Knowledge and skill constructs were characteristic of this category and a strong link to students' learning was emphasised. It was about the students' ability to develop the understanding of concepts through skills developed in solving equations and drawing graphs to illustrate the economic concepts being learned. Elaborating further, as referred to in Category II in which economics content as words, mathematical equations and graphs were expressions of content, this category described students' ability to create an economic argument by making that link between economic constructs and appropriate representations. For example, L4 related words to diagrams:

> You tell them something in words and ask them to represent that as a change on the diagram. [L4]
>
> When you bring stuff that needs a lot of deduction, logical thinking and especially critical thinking, they have trouble. They are good at memorising, regurgitation - they can do that well. When teaching a concept, I explain it in words for those who really like words. Then, I can formulate an equation for that I just put it mathematically as well. And then for others who are not good in mathematics, I put it in a graphic form. So I do three things per concept. And I guess I would have catered for everyone. [L6]

Furthermore, L6 pointed to the common problem of some students at this level having a weak background in mathematics, which they had to overcome:

> And another challenge again, economics – some of the concepts – they are best explained mathematically. But with students who don't have a mathematics background, like the students from Arts, so now it is really like treading on a thin wire. But what I try to do is try to relate to everyone in the most basic form that I can. [L6]

Tutors also expressed this aspect of their roles in helping students to learn the basics of economics, such as:

> So far I think it would be the graphs … on the graph he didn't understand or be able to interpret it, you know. And that's when we reminded him of the concepts you need to understand before you actually can run a graph. [T4]
>
> We actually go through it with them. We make sure they understand each step. I think it does help if you do it that way because, I mean, you're actually working through the problem with them. We kind of give them hints why this shifts: why did this caused certain shifts in the economy? So we don't just solve the questions for them, No! [T3]

And their work was not without its frustrations in this respect:

> They just don't know how to relate concepts. They just don't! It's almost as if they cram them and then when they are asked to apply what they know, that's where you can see that they really don't understand the work. [T2]

Unlike the first three categories, this category expressed a more advanced way of thinking of representations, where students made links and arguments, rather than mere recognition.

Category V:

Teaching Economics 1 as helping students acquire Economics knowledge by making this relevant to students' own context and experience.

This category of description considered teaching Economics 1 as helping students ground their understanding of economics knowledge through applying their understanding of economics to their own real-life contexts. As such, this category was student-centred. It spoke of teaching grounded in students' economic realities, enabling them to relate better to economics knowledge. L1 and L6 illustrated this category below:

> I try to bring in real-life examples … to get the students involved as much as possible. [L1]
>
> I have got my own teaching philosophy that I ascribe to. I use a learner-centred approach because I have to actually relate to where they come from. If you just teach [Economics] as a theoretical course it becomes technical. You just bombard students with a lot of jargon. Instead, you need to break it down into smaller things that they can relate to everyday living. Also, as I teach I've realised that I have students from different backgrounds. It becomes a challenge usually because I have to try to relate with people who have never done economics at high school. [L6]

And from other tutors:

Explain the concept based on something they can relate to. [T7]

I have a feeling a lot of them don't understand it yet. They don't understand what Economics is. It's not personalised enough. [T3]

This category expanded the view of teaching Economics I out of the lecture hall and tutorial room to the world of the students, as lived outside the university. Lecturers' understanding of teaching Economics 1 within this category of description was seen as helping students understand economic issues through development of their own meaning aligned to the disciplinary knowledge of economics. It was about experience and relevance, as the extract from L6 illustrated:

… decompose those concepts into everyday tangible things that students relate to. Make economics come to their own backyard. I think in that way you can really touch them. … So if you can bring it to their experience and let them try to understand it in their own way, but as long as it is economically correct, it's fine. So you encourage that individual thought. [L6]

L4 saw the problem of teaching economics to the relatively inexperienced students they taught:

Trying to turn these concepts into real world experiences is a lot more difficult because they have such limited experience in the world. You have to try and take these concepts and make them into something that they are familiar with. [L4]

The lecturers' way of understanding teaching Economics 1 was centred on making that connection with students' own experience irrespective of how limited or rich it was, making the content relevant to their world.

Category VI:
Teaching Economics 1 as helping students think like economists.

This final category of description described teaching Economics 1 as developing students' economics thinking, and was only encountered in the lecturers' interviews. The category was very *student-learner-centred* and *learning-economics-focused.*
L1 pointed that:

… Economics teaches you a very different way of thinking […]. These students have […] got to learn how to think in this way. So often you've got to introduce them to it quite slowly. Economics teaches a very different way of thinking and so […], they've got to learn how to think in this way. [L1]

Emerging from the four categories of description earlier presented, this category was about helping them make that conceptual transformation from content to the real-life context and then to '*think*' like an economist. L3 also compared economics with other, related, disciplines:

Look, I think that when you're doing law it's a different style. You know, like for instance you know you get a whole lot of law cases or whatever the case is, and then you have to decide for, oh, what was the issue, what was the ruling, what was the precedent etc.? Then you get accounting where also it's a different style. I would say that the style is different from your other subjects. And, so the mind, your approach to that, so your mind-set to try and tackle these concepts should also change because it's a different style of learning… […]… Economics is a very different style. Like it's a different way of thinking. [L3]

This category of description was the most complete amongst the six that emerged from the phenomenographic analysis of all the interview transcripts. The student was placed at the centre, and was seen as active, unlike the passive role they assumed in the earlier categories.

4. Discussion one: analysing the categories

Categories of description from a phenomenographic study of a phenomenon can be conceptualised as the obverse of the *conceptions* of the phenomenon held across the population that was examined. Thus, we can say that within the population of lecturers and tutors of Economics 1, six conceptions could be observed. That is not to say that any single member of the population could be categorised as holding one such conception; nor could any single conception be drawn from members of the population. There was no one-to-one correspondence. Indeed, any member could express a set of these conceptions according to the context in which they were speaking.

The six categories of description can now be analysed in terms of their referential focus and their structure, where the structure is considered in terms of the internal horizon and the external horizon. These are given in summary in Table 1.

Table 1 highlights the logical ordering of the categories of description, from the least to the most complete category. The structural aspect of each category became more extensive, both internally and externally, and they were inclusive of the previous categories. There was a distinct shift of focus from the teachers' teaching in Categories I, II and III to not only their teaching but also their students' learning in Categories IV, V and VI. Along with that shift from teaching to learning, there was a shift away from the postulated curriculum and the formal requirements of the university towards the disciplinary features of economics in the real world. It is worth emphasising again that each category included the previous ones. For example, Categories V and VI would not preclude teaching as having a thorough economic content knowledge, or paying heed to the requirements of the university. Instead, they suggested that there was more to teaching Economics 1 than just the teacher's identity as an expert in the field and familiarity with the rules.

The emphasis on the centrality of the Economics 1 curriculum in the earlier categories as compared to the later ones was another distinctive feature of this comparison, adding to the two new dimensions: *teacher-centred orientation to teaching* and *student-centred orientation to teaching.* This feature itself was the basis of the progression in subsequent categories towards the completeness of the

Table 1
Categories of Description: Lecturers' ways of understanding teaching Economics 1.

Category	Referential Aspect	Structural Aspect	
		Internal Horizon	*External Horizon*
I Teaching Economics 1 as a collaboration between lecturers and tutors to implement the economics curriculum	Teaching as a job in higher education with responsibility to colleagues	The Economics 1 curriculum Meeting schedules	The programmes where Economics 1 was an element
II Teaching Economics 1 as having a thorough knowledge of the content	Teaching the content of Economics 1	The Economics 1 curriculum Professional and academic knowledge at the level of Economics 1	The programmes where Economics 1 was an element
III Teaching Economics 1 as transmitting the content of the textbook, assessing correctly, and students being able to pass examinations according to the curriculum	Teaching as transmitting the Economics 1 content and fulfilling the requirements of the course	Economics 1 curriculum content Forms of assessment Examination	The programmes where Economics 1 was an element University requirements
IV Teaching Economics 1 as helping students learn key economics concepts, and developing students' ability to use appropriate representations (knowledge constructs and skill constructs of Economics 1)	Teaching as developing students' understanding of economics constructs	Economics 1 content Economics conceptual knowledge and skills Representations (graphs, equations) used in economics	The programmes where Economics 1 was an element University requirements Economics discipline
V Teaching Economics 1 as helping students acquire economic knowledge by making this relevant to students' own context and experience	Teaching as making economics knowledge relevant for the students	Economics conceptual knowledge and skills Real-life examples of economics phenomena	The programmes where Economics 1 was an element University requirements Economics discipline Economics in the world outside the university
VI Teaching Economics 1 as helping students think like economists	Teaching as developing students' economics thinking	Conceptual understanding Economics knowledge Real-life examples Ways of thinking as an economist	The programmes where Economics 1 was an element University requirements Economics discipline Economics in the world outside the university Economics as a discipline

Table 2

Orientations of teachers' six conceptions of teaching Economics (Ojo, 2016).

	Conceptions	Orientation
I	Team collaboration to implement the economic curriculum	*Teacher-centred orientation to teaching*
II	Having a thorough knowledge of the content	
III	Implementing the curriculum in order for students to pass assessment	
IV	Helping students learn key economics concepts and representations to facilitate learning	*Student-centred orientation to teaching*
V	Engaging students through their real-life economics context to acquire economic knowledge	
VI	Helping students to think like economists	

later categories. In other words, a thorough knowledge of the content grounded in the curriculum was seen as very important and the focus on the curriculum drove teachers' collaboration and thorough knowledge of the content.

A further shift is worth noting. This was the shift from focus inwards to the course and its place in the academic discipline, to a focus outwards to the real world where students found examples and were able to see them through the lens of economics.

5. Discussion two: implications for student learning

If we return to Table 1, we can see that the six qualitatively distinct categories of description, now also seen as six conceptions of teaching to be found across the economics faculty at SAUni, pointed to two distinct orientations: *teacher-centred orientation to teaching* and *student-centred orientation to teaching*, as shown in Table 2.

This distinction is in line with the work of Samuelowicz and Bain (1992) as well as other authors' studies of university teachers' ways of understanding teaching (Prosser et al., 2008; Prosser and Trigwell, 1999). Teacher-centred teaching implies an assumed passivity of students in which their existing knowledge is taken for granted and teachers perceive themselves as simply being transmitters of knowledge (Cheng et al. 2015). The converse holds for student-centred teaching which "focuses more on the students' learning and their construction of knowledge, rather than on the teacher's teaching" (Cheng et al., 2015, p. 2).

The significance of the two orientations is that with a predominantly teacher-centred orientation, attention to what sense students are making – their learning – is scant. At least with a student-centred orientation, there is an expressed awareness of the students and their needs. Elsewhere (Ojo, 2016; Ojo et al., 2018), drawing on the work of (Maton, 2009), we argue that being student-centred is not entirely the same as being student-learning-centred since learning is an aspect of pedagogy that is not readily understood by many university faculty members. The last two conceptions are more in line with an affordance for learning in a meaningful sense, in that they afford a gaze outside the world of the university and its formal learning situations.

Table 3 indicates that there are three focuses of economics knowledge – the first pair of conceptions gravitate towards the regulation concerning curriculum, the second pair gravitate towards the knowledge demanded within the university and its requirements, while the third pair gravitate towards the world outside the university, where the students will put their knowledge into practice. Matonös (2009) concept of 'conceptual gravity' informs this new dimension of pedagogical consideration to challenge faculty.

As said, orienting their teaching to student learning is poorly understood by faculty in higher education. The issue that has to conclude this paper is how to bring about such understanding. At a simple level, exposing teams of teachers to research results such as these can offer a better understanding of the range of orientations among fellow faculty members. However, at depth there needs to be a better understanding of underlying theories of learning and teaching. A study of teams of faculty members led to a model of collaboration in and consideration of teaching (Benjamin, 2000) with dimensions of information, reflection, communication and conception. That paper concluded that,

> If we are to improve the practice in teaching-teams we need to help teams understand the range of possible outcomes which might result and their benefits and consequences. If teachers see the team as getting in the way of their teaching, or as a way of sharing workload, they will be unlikely to change their practice, no matter how many skills they develop. If teachers see opportunities in teamwork to improve student learning, they may have an inclination to grasp that possibility, even if they need to develop skills as

Table 3

Focus of economics knowledge in the teachers' six conceptions.

	Conceptions	Orientation	Focus
I	Team collaboration to implement the economic curriculum	Teacher-centred orientation to teaching	*Focus on the regulations of teaching economics*
II	Having a thorough knowledge of the content		
III	Implementing the curriculum in order for students to pass assessment		*Focus on knowledge of economics internal to the university, the curriculum, and assessment*
IV	Helping students learn key economics concepts and representations to facilitate learning	Student-centred orientation to teaching	
V	Engaging students through their real-life economics context to acquire economic knowledge		*Focus on knowledge of economics as encountered in the wider world*
VI	Helping students to think like economists		

they go. (Benjamin, 2000, p. 203)

This is a call for the faculty to work as teams in such a way that not only schedules, or economics knowledge, or compliance with curricular norms, or paying attention to the multiple representations used in economics (without neglecting those) come to discussion and reflection, but also the body of work on learning and teaching in higher education. Doing this needs engagement, with an intention to improve student learning. And, as Benjamin ended her paper: "Of course, skill workshops have their place, but only once staff also have the intention" (Benjamin, 2000, p. 203). Thus, it is the last two of our categories of conception that one would hope to find being widely expressed among teachers of economics.

6. Conclusion

In this paper, we have presented the results of a qualitative empirical study of a team of economics teachers in higher education and their conceptions of teaching economics. These six conceptions of teaching were teaching as (I) collaboration between lecturers and tutors to implement the economics curriculum; (II) having a thorough knowledge of the content; (III) transmitting the content of the textbook, assessing correctly, and students being able to pass examinations according to the curriculum; (IV) helping students learn key economics concepts and developing students' ability to use appropriate representations; (V) helping students acquire economic knowledge by making this relevant to students' own context and experience; and (VI) helping students think like economists. Unlike dominant literature in the field of tertiary economics education which are mostly quantitative, our results are qualitative using phenomenography as both the conceptual and methodological framework, comparable to previous similar results. Our results, though not generalisable, are valid and reliable in that the process through which they emanated is within the tradition of a rigorous phenomenographic framework.

We have identified two distinct orientations to these conceptions: a teacher-orientation and a student-orientation, in line with research concerning other disciplines in higher education. We see that there is a range of concerns from the practicalities of collaborating to teach a very large student cohort, to preparation for teaching, and ways in which teaching is aimed at supporting students for effective learning. We conclude that, in order to improve student learning, there should be concerted efforts within such teams as these to engage in reflection and communication that bring the later conceptions, in particular the final two, to the forefront.

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