



In 2016 UM celebrated its 40th anniversary. Since its foundation, UM has applied problem-based learning (PBL) in all educational programs. During the years, UM has grown significantly, and with it the variety of interpretations and implementations of PBL, leading to different norms, beliefs, and practices of PBL and student-centered education at UM. UM's anniversary, therefore, led not only to celebration, but also to **reflection on the university's educational perceptions and practices**: Where do we stand? What can we learn from the existing inter-faculty and inter-program diversity of approaches? How do these practices relate to state-of-the-art research and theory on education? How do students, teachers and other stakeholders experience the university's PBL strategy? Are we well equipped for another forty years and beyond?

These questions led to project EDview, initiated by the Department of Educational Development and Research (FHML) and EDLAB. EDview collected and synthesized the educational experiences of students, teachers, course coordinators, program directors, educationalists, policy makers and other stakeholders at UM, with the aim to establish a **shared view on UM education for the future**, and suggestions for action following from this view. In several data collection rounds, EDview held interviews and focus groups, reviewed literature, conducted a survey open to all UM students and staff, and held feedback sessions on its preliminary results with a wide selection of stakeholders.

Presenting the UM view on education in a way that facilitates implementation, EDview translated its empirical and theoretical data into things we should do at UM (do's), things we should no longer do (don'ts), and things we should investigate further before we decide if or how we should do them (don't knows). EDview's results are captured in two documents: a **position paper** on UM education for the future, and an overview of **do's, don'ts and don't knows** that follow from taking this position. The latter distinguishes five interrelated areas: designing education, coordinating education, teaching, explaining education, and enabling education. Finally, the appendices report details on 1) the EDview methods, 2) the EDview survey sample, 3) the EDview survey results specified, 4) contributors to the EDview project, and 5) the EDview project team.

EXECUTIVE SUMMARY EDVIEW POSITION PAPER

THE FULL POTENTIAL OF PBL PHILOSOPHY: DIVERSIFYING EDUCATION AT UM**Project EDview**

EDview reflected on education at UM: Where do we stand? How do students and staff experience UM's PBL strategy? Are we well equipped for the future? EDview aimed to establish a shared view on UM education for the future (presented in EDview's Position Paper), and concrete suggestions for action following from this view (presented in EDview's Overview of Do's, Don'ts and Don't Knows). In several data collection phases, EDview held interviews and focus groups, reviewed literature, conducted a survey open to all UM students and staff, and held feedback sessions with a wide selection of stakeholders.

The current state of PBL at UM: satisfaction with theory

The EDview results show that many students and staff stand behind UM's choice for PBL. The EDview Survey, completed by 1,743 students and staff from all faculties, showed high satisfaction scores of respondents' experiences with education at UM in general and the educational method being PBL. This resonated with EDview's qualitative data, which further explained that the high satisfaction scores mainly refer to the "idea" and theory of PBL, but to a lesser extent to its practice. It was found that PBL fits well with state-of-the-art educational theories, which promote constructive, collaborative, contextual and self-directed learning to enhance deep learning, motivation for learning, and 21st century and lifelong learning skills.

The current state of PBL at UM: dissatisfaction with practice

EDview Survey respondents were least satisfied about how PBL is carried out in practice, and interview participants felt that UM had not fully succeeded in delivering on the promise of PBL. Participants for example experienced challenges related to the seven steps format, staff capacity, alignment with assessment, tutorial group size, applying PBL in different disciplines, and a mismatch between how PBL is communicated and what students and staff encounter in practice.

The current state of PBL at UM: a trend towards flexibility

It was apparent that when we currently talk about PBL at UM, we often mean the seven-steps-like tutorial structure. Simultaneously, a trend can be observed of defining and approaching PBL in a broader way, with PBL variations and alternatives being applied in several programs across faculties. A majority of the EDview Survey respondents would like UM to be more creative and flexible about how to implement PBL in the future.

Where to go from here

Considering the above, we can distill a view on UM education for the future, specifically the role of PBL. For the future, we do not take any PBL *format or structure* as a starting point. We take 'only' the UM *philosophy* of PBL (constructive, collaborative, contextual and self-directed learning) and the course/program objectives as starting points. We design education based on one key question: *Following the UM philosophy of PBL, how can I design education in a way that best achieves the learning objectives?* This implies a diversification of UM education, in order to achieve the full potential of PBL philosophy.

How to get there

EDview's message is not new: previous projects and documents described similar issues, and current UM education is already diverse. However, why do we still talk about PBL as a synonym of the seven steps tutorial structure, and why do some teachers feel they can only innovate 'under the radar'? EDview put together a comprehensive overview of Do's, Don'ts and Don't Knows that range from teaching and designing education to marketing and communication, leadership and human resources - suggesting the actions and attitudes needed if we commit to the UM view on education described above. Importantly, the UM philosophy of PBL is not static; we should approach it as a dynamic, shared framework that drives continuous debate and dialogue about educational quality and improvement. In an organization that wishes to cultivate a vibrant educational culture, this conversation must never stop.

THE FULL POTENTIAL OF PBL PHILOSOPHY

DIVERSIFYING EDUCATION AT UM

Many things are happening in the UM-wide education landscape of 2018: the CORE strategic program is being further conceptualized and operationalized, the quality agreements focused on making improvements in several key areas have been set and presented to the Minister of Education, and many stakeholders have worked hard to prepare the NVAO accreditation panel's visit to UM in October 2018, for the purpose of reaccreditation of UM and recertification of its Quality in Internationalization feature. Additionally, 2018 saw the birth of the Faculty of Science and Engineering, as well as of several new programs, curricula, projects and activities across faculties.

It seems we have our things on track. Why the need for a position paper on UM education for the future, and how does it relate to the existing vision and strategy on education? If we take a closer look at the current state of education at UM, as investigated in project EDview, the need for explicating a shared position statement becomes apparent.

The current state of PBL at UM: satisfaction with theory

UM has since its foundation profiled itself as a PBL university - in addition, the current UM vision on education highlights several other key themes, including internationalization and an integration of academic and professional development ("UM Vision on Education", 2018). EDview results show that many students and staff stand behind UM's choice for PBL. The EDview survey, completed by 1,743 students and staff from all faculties, asked respondents how satisfied they were about their experiences with education at UM in general and the educational method being PBL, which showed high scores (Table 1, means 4.1 and 4.0, respectively, scale 1-5). Similarly, high scores were found on items that asked more specifically about the extent to which UM education, based on respondents' experiences, encourages students to collaborate and to self-direct their learning, and the extent to which it is related to professionally relevant problems (Table 1, means 4.2, 4.3 and 4.1, respectively, scale 1-5).

"I think that the starting points from which PBL was built are still great starting points. And we, teachers and students, should be made much more aware that we can operationalize those starting points in many different ways. (...) Variation also makes it much more fun. (...) We have to get rid of those rituals."

Staff participant EDview

The survey findings resonate with EDview's qualitative data – which include the many textual comments made by survey respondents, the focus groups and interviews with students, teachers, course coordinators and program directors from all faculties, and focus groups with educationalists and policy makers – that explain that the high satisfaction scores mainly referred to the "idea" and theory of PBL, but to a lesser extent to its practice. Interview and focus group participants generally expressed their appreciation for PBL

as a concept, being based on theoretical principles of learning - constructive, collaborative, contextual and self-directed learning – which many recognized as overall relevant and essential to student-centered education.

Many participants felt that the PBL approach contributed to students becoming independent and critical thinkers, problem analyzers and solvers, skilled communicators, and academics equipped with research skills, able to take responsibility for their own learning process. The educational researchers and experts, whom EDview consulted in its first phase of data collection, pointed to a current evidence base that shows that it is exactly

“Even though I am not a big fan of PBL (...) I still think that it is a better way to learn than the lecture-based system. We still have to think for ourselves and all the time re-evaluate what we learn.”

Student participant EDview

these “21st Century Skills” that determine success or failure on the labor market. These participants also mentioned that evidence for under which conditions PBL “works” is, however, controversial – which is partly due to the limitations of research. The educational literature has witnessed an ongoing debate on the benefits of PBL, with strong proponents and opponents. The controversy clusters mostly around PBL’s contribution to the application and transfer of knowledge, which is dependent on the way PBL is

“It’s debatable indeed, but I do believe that discussing in small groups gives them the substantial skill that is important in the labor market nowadays, in groups to open up and deliver their thoughts on the spot and be open to accept other points of views. It takes them one point further.”

Staff participant EDview

implemented (Dolmans, Loyens, Marcq, & Gijbels, 2016). However, when it comes to social and cognitive domains, i.e. the development of particular 21st century skills such as communication skills, a body of evidence can be found that consistently demonstrates PBL’s advantages when compared with more traditional, teacher-centered education. Additionally, a large pool of anecdotal evidence in favor of PBL exists, including in the EDview data, especially when it comes to 21st century skills.

EDview Survey Item	Mean	N	SD
<i>I’m generally satisfied with the current state of education in the UM program(s) I’m involved in regarding...</i>			
...the educational method being PBL.	4.0	1,501	1.1
...how PBL is carried out in practice.	3.4	1,493	1.2
...the preparation for a student’s future life and career.	3.7	1,419	1.1
<i>In my perception, the education in the UM program(s) I’m involved in is overall sufficiently...</i>			
...encouraging students to collaborate.	4.2	1,629	0.9
...encouraging students to self-direct their learning.	4.3	1,621	1.0
...related to problems that are professionally relevant.	4.1	1,578	1.0
Overall, how satisfied are you with your experience with education at UM?	4.1	1,518	0.9
Regarding its education, to what extent do you feel that UM is well prepared for the next 20 years?	3.7	1,467	1.1

Table 1. EDview survey respondents’ satisfaction with the state of education at UM. (Five-point Likert scale)

The educational researchers and experts in EDview’s focus groups argued that PBL fits well with state-of-the-art educational theories, which promote approaches that take the principles of constructive, collaborative, contextual and self-directed learning into account to enhance deep learning, motivation for learning and skills for lifelong learning (e.g. Dochy, Berghmans, Koenen, & Segers, 2015). Box 1 explains these learning principles in more detail. EDview participants indeed noticed these advantages in situations where PBL was functioning well and where it consequently approximated its theoretical ideal.

The PBL Principles:
Constructive, Collaborative, Contextual and Self-directed Learning

*“The **constructive** learning principle emphasizes that learning is an active process in which students actively construct or reconstruct their knowledge networks. (...) Competence is fostered not primarily by teaching to deliver knowledge, but through teaching to stimulate specific kinds of cognitive activities. (...) In other words, learners should be involved actively and should be stimulated towards activation of prior knowledge, elaborations and deep learning because this leads to deeper and richer understanding and better use of knowledge.”*

*“**Collaboration** is a social structure in which two or more people interact with each other and, in some circumstances, some types of interactions occur that have a positive effect. Collaboration is not a matter of division of tasks among learners, but involves mutual interaction and a shared understanding of a problem. Collaborative learning takes place when the following conditions are met: participants have a common goal, share responsibilities, are mutually dependent and need to reach agreement through open interaction.”*

*“Learning always takes place in a **context** or, in other words, all learning is situated. The situation in which knowledge is acquired determines the use of this knowledge. Knowledge transfers less easily across different types of situations. However, transfer can be facilitated by anchoring learning in meaningful contexts, revisiting content at different times in rearranged contexts, for different purposes and from different perspectives. Viewing problem environments from multiple perspectives increases transfer of knowledge or the flexibility with which learners can deal with new sets of events and as such prepares learners for future learning.”*

*“**Self-directed** learning implies that learners play an active role in planning, monitoring and evaluating the learning process. Planning implies that a learner starts with considering a variety of ways to approach a task, sets a clear goal, selects strategies for achieving the goal and identifies potential obstacles to successful attainment of the goal. Monitoring implies that the learner is aware of what he or she is doing and anticipates what ought to be done next, by looking back and forward. After completion, evaluation takes place of both the process and the product of the learning process. (...) [Learners] should be stimulated to regulate or direct their learning process both from a motivational and a cognitive perspective. Learners should be prepared to become lifelong learners who are able to acquire new knowledge and skills rapidly”.*

Box 1. The PBL Principles. Source: Dolmans, De Grave, Wolffhagen, & van der Vleuten, 2005.

The current state of PBL at UM: dissatisfaction with practice

Somewhat in contrast to the high scores in the EDview survey reported above, the item asking about respondents’ satisfaction with how PBL is carried out in practice scored lowest among all respondent groups, with a mean score of 3.4 (Table 1, scale 1-5). Two other items that scored relatively low among all groups were the extent to which respondents felt UM was well prepared for the future regarding its education, and respondents’ satisfaction about how UM prepares students for their future life and career (Table 1, means 3.7 and 3.7, respectively, scale 1-5). On a same note, the qualitative data showed that participants were less satisfied with the current practice of PBL as compared with its theory, and felt that UM had not fully succeeded in delivering on the promise of PBL. Issues mentioned in this regard included:

“Even with like finding learning goals and writing essays and all of that, it still very much depends on figuring out what your tutor wants (...). So I still feel, that it is not that genuine a lot of the times.”

Student participant EDview

- *The seven steps format that many experienced as either not being applied or not enabling learning to its fullest potential.* An often-heard comment from teachers and students alike was that they felt the seven steps stood in their way; for teachers to do as they saw fit in class, and for students to effectively prepare for their exams. A persisting debate existed about the applicability of the seven steps in different disciplines.
- *The commitment to the seven steps as a valuable structure provided the conditions for it to function properly were met.* The specific challenges most commonly addressed were well-designed problem cases and adequate tutors and teachers. The teacher was overwhelmingly mentioned as the key aspect of high quality education, making it also a major challenge to have sufficiently well-trained and capable staff in place.
- *A not always optimal alignment between PBL and current approaches to assessment.* The focus on summative, standardized assessment where grades are often the only form of feedback, and students and teachers feel forced to “cover everything”, was mentioned by many participants as the main culprit for why PBL could not live up to its potential.
- *The continuously growing numbers of students.* The data indicated that this led to tutorial group sizes being increased well beyond their desirable size, thereby compromising active and collaborative learning.

“So now you just have tutorial groups with at least, sometimes even twenty people when there’s like not even enough room. (...) I feel that the core of PBL kind of gets lost when you have so many people in your tutorial group.”

Student participant EDview

Students mentioned that the way PBL was communicated and introduced to them often did not match with what they encountered in practice. Because PBL was largely presented and communicated to them as the seven steps, students felt they “did not do PBL” when this format was not used, and when it was, they often felt it did not live up to their expectations as created by the “ideal picture” on the UM website and in

“PBL as it is conducted at the moment at our faculty is far removed from the original notion of PBL. Literature is given, for example, and the assessment methods discourage PBL-style learning. Knowledge about PBL, the process, what it is good for, is lacking pervasively.

(...) In my opinion the statement of PBL as the instructional method here is largely false advertising,”

Student participant EDview

trainings. Teachers noticed indeed a decline of the ideal tutorial picture, with some teachers moving to more teacher-centered education “behind the classroom door” – which was appreciated by students as effective exam preparation. It was mentioned that, besides students, also many teachers were not aware of the theoretical learning principles behind PBL.

The current state of PBL at UM: a trend towards flexibility

From the EDview data it was apparent that when we currently talk about PBL at UM, we often mean the seven-steps-like tutorial structure, with typically two tutorials per week. In marketing and communication, this typical structure is emphasized as well (“Problem Based Learning”, 2018), where it is often positioned as the UM operationalization of a constructive, collaborative, contextual and self-directed way of learning. However, a trend can be observed, in the EDview data as well as policy documents and practice, of defining

and approaching PBL in a broader way that takes its conceptual learning principles as a starting point rather than the procedural tutorial structure. In that sense, variations of the seven steps have been developed in several programs across faculties, and other forms of student-centered education, such as project-based learning and research-based learning, are being practiced. Yet, the EDview data showed that teachers employing these methods often felt they had to justify why and how their approach “deviated from standard PBL”, and some rather stayed under the radar to avoid their approach being questioned.

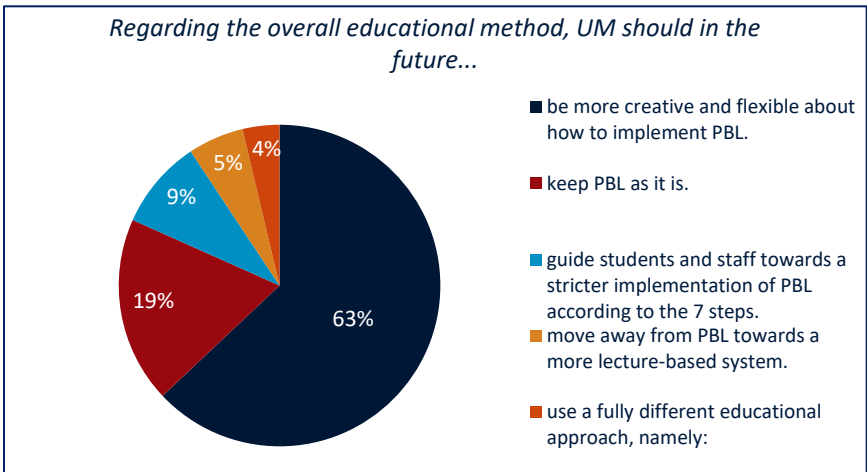
“If you just stick to one model, without adapting to the world as it passes by you, you’re going to be obsolete in no time.”
Staff participant EDview

“Problem-solving has been at the heart of teaching/learning in mathematics, science and engineering for millennia. (...) Education in STEM subjects should reflect the culture and demands of these subjects, and not be a dogmatic application of PBL.”
Staff participant EDview

The need to interpret PBL in a broader way was also visible in the EDview survey data. When being asked where UM should go in the future regarding its overall educational method, a majority of 63% answered that they would like UM to be more creative and flexible about how to implement PBL (Figure 1). Also the explanations of the 4% who voted for a fully different educational approach often came down to a more flexible and broader interpretation of

PBL. As such, Figure 1 shows a strong commitment to PBL, though also a clear signal that we need to rethink our definition of PBL - where we create space for new ways, yet leave room for old ways too, as 19% wished to keep PBL as it is, and 9% wished for a stricter implementation of the seven steps.

Notwithstanding this commitment to PBL, the EDview data also showed a critical discussion on keeping the “PBL label” for UM’s educational approach. Some EDview participants felt that the term PBL was mainly there for marketing purposes, and that it had lost its meaning in UM practice considering the existing diversity of approaches and viewpoints. Even for marketing purposes the term was questioned by some, considering the fact that other universities had installed similar student-centered approaches. These participants questioned the added and distinctive value of the PBL label. The majority of participants, however, as confirmed by the EDview survey results, still felt committed to the choice for PBL, and felt it



had still meaning and distinctive potential also when repositioning it as a broader philosophy. They generally appreciated that UM had made an explicit choice for an educational direction.

Figure 1. EDview survey respondents’ opinions on where to go in the future.

Where to go from here

If we consider the current state of PBL at UM as described above:

- the large support among UM students and staff for the underlying philosophy of PBL;
- the fit of PBL with state-of-the-art principles of learning;
- the identified feeling that we can do better for UM's and its students' future;
- the experienced challenges in the current implementation of PBL, e.g. related to the seven steps format, staff capacity, alignment with assessment, and tutorial group size;
- the persisting debate about the role of PBL in different disciplines;
- the mismatch between how PBL is communicated and what students encounter in practice;
- and the existing trend towards a broader interpretation of PBL,

we can distill a view on UM education for the future, specifically the role of PBL:

Educational approaches at UM serve students and teachers in achieving the intended learning outcomes. Hence, for each program and course, we consider which approaches, structures and formats fit best. At UM, we make these considerations with one guiding framework in mind: the UM interpretation of PBL philosophy.

UM interprets PBL as a constructive, collaborative, contextual and self-directed approach to learning (Box 1), with problems from professional and academic practice inspiring education. We take these principles as a starting point to teaching and designing education. We develop procedures and instructional formats based on one key question:

- Following the UM philosophy of PBL, how can I design education in a way that best achieves the intended learning outcomes?

We follow this philosophy of PBL because we believe students are the center of the learning process – they construct their own knowledge, jointly with others and situated in relevant contexts, and they are therefore in the best position to direct their own learning. Our job as teachers is to facilitate students' knowledge construction and their academic and professional development.

We commit to finding optimal and creative ways of stimulating constructive, collaborative, contextual and self-directed learning, using the full potential of UM's PBL philosophy, in order to deliver independent and critical thinkers, skilled communicators and collaborators, well equipped researchers and professionals, experienced problem analyzers and solvers, and lifelong learners.

This position implies a diversification of education at UM, in order to achieve the full potential of UM's PBL philosophy.

- It means an end to or adaptation of the current tutorial structure and also the seven steps format if other structures or formats are a better fit with both UM's PBL philosophy and the intended learning outcomes;
- It means a continuation of the seven steps format where this is a good fit and has proven to achieve intended learning outcomes;
- It means that the many existing variations that were developed with the above PBL philosophy in mind are fully legitimate and "still PBL". These should be celebrated and shared;
- It means an end to existing variations that moved away from UM's PBL philosophy.

This position does justice to the variety of views of students, teachers and other stakeholders at UM on the choice for and value of the PBL concept, also for the future. It acknowledges the broadly felt need to shape PBL in a way that is better fit-for-purpose in different programs. It has the potential to address the currently experienced problems with PBL implementation, because it emphasizes that the intended learning outcomes and the student-centered PBL philosophy are guiding, rather than procedures that may feel restraining and pose practical challenges. This view confirms, complements and elaborates on what the CORE strategic program says about education: that UM encourages diversity and bottom up initiatives, and simultaneously stays true to PBL principles (*Community at the CORE: Strategic programme 2017-2021*). It connects with the recently updated UM vision on education which emphasizes the PBL principles (*Self-Evaluation Report for the Institutional Audit 2018*; "UM Vision on Education", 2018), and it provides evidence for the shared support of this vision, yet adds an analysis and explanation that has implications for practice. Indeed, it is not clear when we will be able to achieve the full potential of PBL philosophy, as there is a challenging path ahead of us.

How to get there

To many UM stakeholders the findings of project EDview may not come as a surprise. The participants' quotes and the described issues of PBL implementation likely sound familiar. Naturally that is a result of EDview's objective to investigate current experiences and a shared view, yet it may also be influenced by previous projects on similar issues. A number of reports and other documents reached similar conclusions about the current challenges faced in PBL at UM, and formulated recommendations for improvement (Drost & EDLAB, 2017; van Heteren, Klaassen, & Pinckaers, 2017; Maurer, Reithler, & Brunotte, 2011; Moust, van Berkel, & Schmidt, 2005; UCM Think Tank, 2016). Furthermore, a number of policy documents have emphasized the philosophy of PBL, next to, or instead of, providing a narrower definition pointing to the tutorial structure (*Community at the CORE: Strategic programme 2017-2021*; Mori, Skarpeid, & Wasenitz, 2017; *Self-Evaluation Report for the Institutional Audit 2018*; van de Wiel et al., 2017). Indeed, as mentioned above, current practice is already diverse, and many of these variations fit like a glove with UM's PBL philosophy. In that sense, EDview's message may not be new and to a certain extent we are there already. The above, however, raises some important questions:

- Why do we still talk about PBL in a way that almost exclusively refers to a seven-steps-like tutorial structure?
- Why do some teachers feel they can only innovate under the radar?
- Why do some programs apply the seven steps while they cannot meet its conditions?
- Why have we not made bigger steps in tackling our well-known challenges, such as the role of assessment?
- Why do we still set the tutorial structure as the standard, and are coordinators faced with many practical challenges if they wish to divert from this?
- ...

"I think especially, we should change our way how to test students, because in a way, we have a PBL university, but our examination is non-PBL, I find often."
Staff participant EDview

The EDview data points to key areas where we can find answers to these questions – such as communication, staff development, and leadership - and more importantly, ways forward. Some of these ways are rather straightforward, others more challenging. EDview put together an overview of “do’s, don’ts and don’t knows” that together paint a comprehensive picture of actions and attitudes needed if we commit to

the UM view on education as introduced above. In its own way, the overview is a presentation of the EDview results that provides answers to the more specific questions around that view. Due to the all-encompassing nature of such an educational approach, the list naturally also includes do’s and don’ts on aspects of educational design, coordination and teaching beyond PBL, but about quality education in general.

"In some courses faculty is forced to use the PBL method even though this might not be the best approach. It is taboo to question or slightly alter the PBL method publicly."
Staff participant EDview

What to stay away from and what to embrace

The UM view on education as described above implies diversification of educational approaches, yet not all aspects of the current and future diversity fit within this view. From the position above it is clear that teacher-centered approaches that do not take the principles of UM’s PBL philosophy into account do not belong at UM. This is especially highlighted in the instructional format of lecturing. The position described above does not mean that a lecture is a no-go, but that it has to be clear how this lecture contributes to constructive, collaborative, contextual and self-directed learning. In other words, it has to take UM’s PBL philosophy as a starting point and be well placed in the student-centered curriculum. The same counts for

"Teachers do CCCS [constructive, collaborative, contextual, self-directed learning] without doing the seven steps and think they’re not doing PBL. Others think they do PBL but they don’t."
Staff participant EDview

any other session. EDview participants noted that we can currently find great examples of student-centered lectures in some programs, as opposed to examples of PBL tutorial sessions that have become teacher-centered and are far removed from UM’s philosophy of PBL. The former we need to keep, the latter we need to change.

In that regard, EDview participants felt the need for a shared framework that provides boundaries to what is accepted and what is not. EDview hopes to provide such boundaries with the above-mentioned view, yet recognizes that the “UM PBL philosophy framework” can be interpreted in many different ways and may not always be a clear guide. Critics may argue that the view above can lead to (even) more confusion about what is and what is not PBL, as UM’s interpretation of PBL as a philosophy might be broader than how PBL is often defined in the literature, and previously at UM, as an educational method. Also, the boundaries of the principles might be far from clear in practice, and practical questions will for example arise about the proportion and type of collaborative approaches, and how to best stimulate self-directed and constructive learning in different situations. Rather than seeing these as difficult questions for which the above framework does not provide a clear-cut answer, it is hoped that we can jointly see these questions as continuous challenges that need to be debated. The confusion, then, can lead to constructive discussion. Rather than seeing UM’s PBL philosophy as something static, we should approach it as a dynamic framework that drives a continuous debate and dialogue about educational quality and improvement. In an organization that wishes to cultivate a vibrant educational culture, this conversation must never stop.

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