

A Blueprint for Teacher Design Team Activities aimed at Technology Innovation

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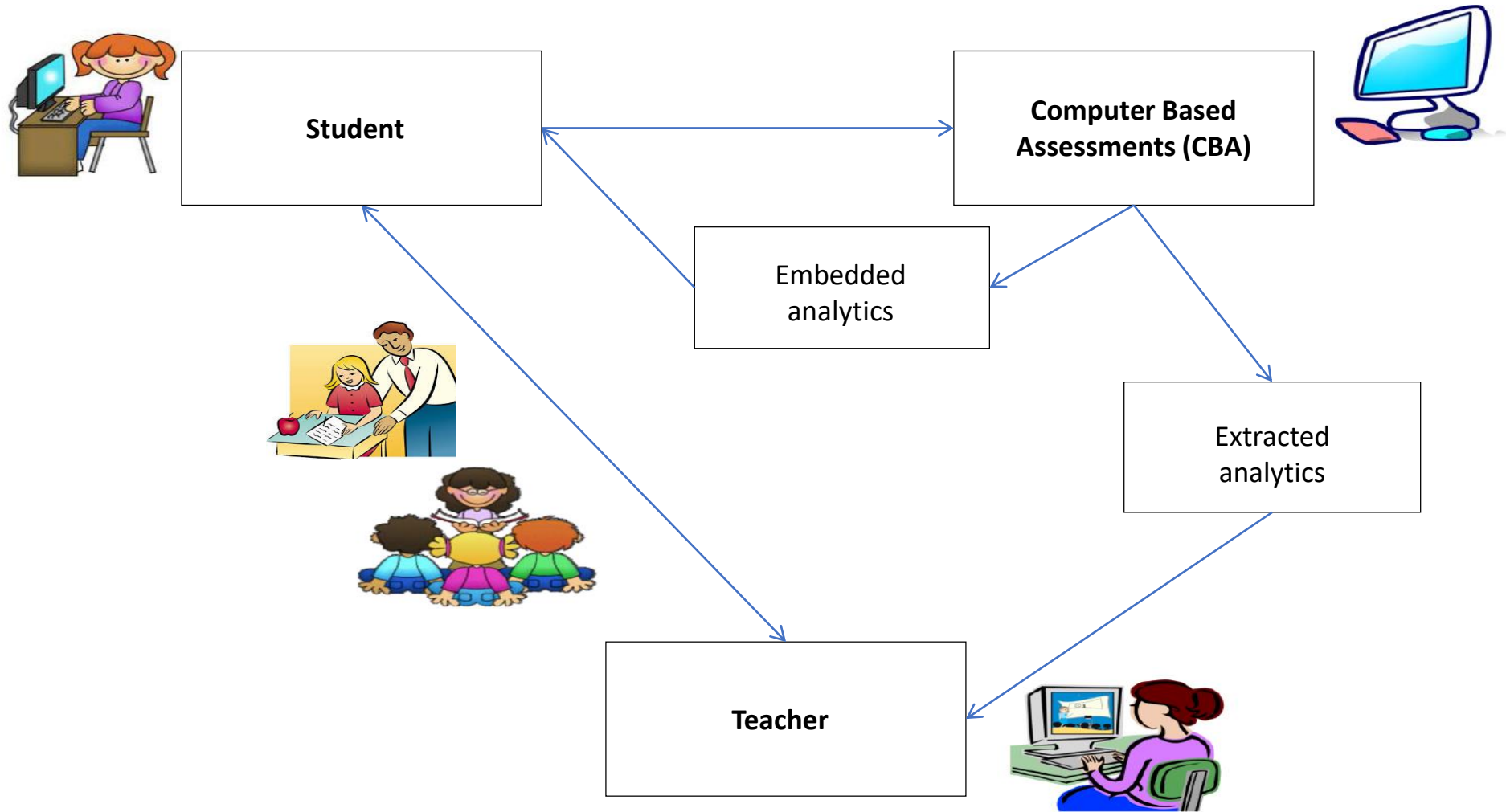


Outline

- Background
 - Project explanation
 - Teacher design teams
 - Aims
- Method
 - Literature search and design models
 - Evaluation in the wild
- Results – recommendations for design teams
- Outlook on future research



Background



Background

- Steps to take...
 - Obtain data
 - Interpret data
 - Translate interpretation to pedagogical action
 - Effect on student learning
- On the one hand: differentiated instruction regarded desirable and effective (Kester et al., 2018)
- On the other hand: quite a list of demands for teacher and contextual factors (Heitink et al., 2016; Mandinach & Gummer, 2016)



Project overview – 3 phases

Phase 1:

Obtain overview of current situation

Background

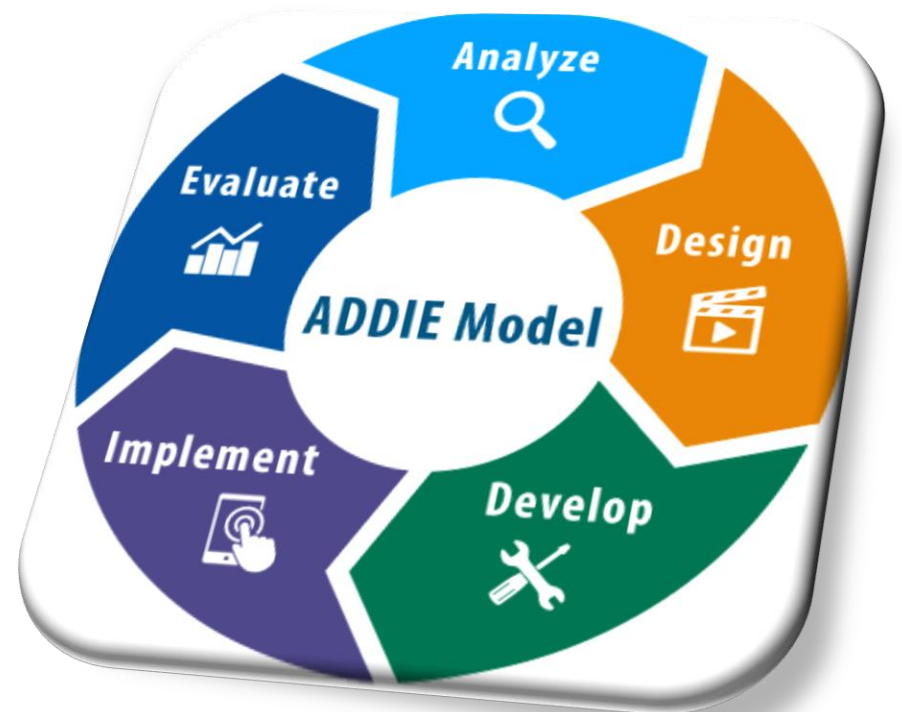
- To professionalize teachers, involve the teachers in this process
- More specifically, employ teacher design teams to create professionalization interventions
- Teacher design teams have been shown to increase teachers' involvement and support of innovations
- Requires support explicitly by a facilitator, but also implicitly by selecting the activities that the team engages in

Background

- While selecting those activities, we ran into a caveat: there were no papers/details about the activities that TDTs engage in!
- Aim: set up and evaluate TDT activities

Method

- Literature search:
 - Literature on team effectiveness
 - Interdependence
 - Roles
 - Communication strategies
 - Role of facilitator
 - Literature on design models: ADDIE model



Method

- Concept “blueprint” for activities
- 5 schools each with one team implemented a TDT and used the blueprint
- Evaluation through logbooks, observation, and interviews

Result

Session	Main goals	Activity
Preparatory activity: Analyze	Analyze current situation	Conduct initial investigation at the school (for example, questionnaires).
Session 1: Analyze	Explain design process	Presentation by facilitator
	Set collaborative values and goals	Padlet brainstorm.
	Analyze current situation	Share results of prior investigation.
	Analyze desired situation	“On the news” activity
	Analyze needed development	Skill hierarchy
Session 2: Design	Determine focus of intervention to be developed	Group discussion
	Discuss examples of interventions	Presentation by facilitator
	Determine “working conditions”	Quick answers sheet
	Create initial timeline for intervention	Timeline sketch + Materials sheet
Session 3: Design	Receive and discuss peer feedback for initial design	Plenary exchange session between schools
Session 4: Develop	Refine intervention	Timeline sketch + Materials sheet
	Plan for evaluation	Group discussion
Pilot test phase	Implement parts of intervention	Dependent on specific design
Session 5: Evaluate & Develop	Evaluate pilot phase	Group presentation
	Refine intervention	Timeline sketch + Materials sheet
	Finalize plans for implementation	Create role division and specific plans

Follow up steps

- Schools now implementing the interventions (adjusted to Covid situation)
- Examine whether teacher skills for differentiated teaching and use of extracted analytics increase
- Examine whether students perceive more differentiated teaching
- Examine teacher practices through logbooks

Questions / feedback / suggestions?

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